

nuclei of certain isotopes of common elements. Radio wave frequencies passes through the substance then reorients these nuclei. When the wave is turned off, the nuclei release a pulse of energy that provides data on the molecular structure of the substance and that can be transformed into an image by computer techniques. Typical substances that can be used for NMR spectroscopy and imaging are shown in Table 1.

IN THE CLAIMS

Please amend claims 3-9, 11-14, 16 and 18 and cancel claim 10.

1. A method comprising

providing at least one of a microdevice and a nanodevice; and

inserting at least one of said microdevice and said nanodevice into a fluid stream within a body.

2. The method of claim 1, further comprising the step of inserting at least one of said microdevice and said nanodevice into a cell.

3. (AMENDED) The method of claim 2, further comprising the step of inserting at least one of said microdevice and said nanodevice into a cell, wherein said cell is a red blood cell.

4. (AMENDED) The method of claim 2, wherein the step of inserting further comprises the step of inserting [the] a substrate into said cell via at least one of reversible osmotic lysis, electroporation, microfine needle injection, and particle gun injection.

5. (AMENDED) The method of claim 1, further comprising the step of inserting at least one of said microdevice and nanodevice into a biological member, wherein said biological member is selected from the group consisting of a blood cell, lipid molecules, a liver cell, a nerve cell, a skin cell, a bone cell, a lymph cell, an endocrine cell, a circulatory cell, and a muscle cell.

6. (AMENDED) The method of claim 1, wherein the step of providing at least one of said microdevice and said nanodevice further comprises providing at least one of said nanodevice and said microdevice selected from the group consisting of a diagnostic system, a transmitter, a receiver, a battery, a transistor, a capacitor, and a detector.

7. (AMENDED) The method of claim 1, wherein at least one of said nanodevice and said microdevice is inserted within a biological member.

8. (AMENDED) The method of claim 1, further comprising the step of inserting at least one of said microdevice and nanodevice into a biological member, wherein said biological member is one of a red blood cell and lipid molecules.

9. (AMENDED) The method of claim 1, further comprising the step of selecting a substrate for at least one of said nanodevice and said microdevice [has a substrate selected] from the group consisting of Gallium Arsenide, silicon, and silicon oxides.

10. (CANCELLED)

11. (AMENDED) The method of claim 1, wherein the step of providing at least one of said microdevice and said nanodevice, further comprises providing at least one of said nanodevice and said microdevice of a resonance type nanodevice.

12. (AMENDED) The method of claim 1, further comprising detecting at least one of said nanodevice and said microdevice by one of electron paramagnetic resonance (EPR), electron spin resonance (ESR) and nuclear magnetic resonance (NMR).

A4 13. (AMENDED) The method of claim 12, wherein EPR detects molecules selected from the group consisting of free radicals, odd electron molecules, transition metal complexes, lanthanide ions and triplet state molecules.

14. (AMENDED) The method of claim 1, further comprising the step of selecting a material for at least one of said nanodevice and said microdevice from the group consisting of phosphorus, arsenic, sulfur, germanium and organic free radicals.

15. (ORIGINAL) A method comprising:

providing at least one of a nanodevice and a microdevice; and

inserting at least one of said nanodevice and said microdevice in a fluid stream within a body, wherein at least one of said nanodevice and said microdevice is extracellular.

16. (AMENDED) The method of claim 15, further comprising the step of chemically modifying at least one of said nanodevice and said microdevice to prolong vascular retention, prevent